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Priority National Scientific and Technical Intelligence Objectives

1. Pursuant to National Security Council Intelligence Directive No. 4, paragraph 2, Director of Central Intelligence Directive No. 4/6 (DCID 4/6) established a list of priority national intelligence objectives as a guide for the coordination of intelligence collection and production in response to requirements relating to the formulation and execution of national security policy.

2. The Scientific Estimates Committee, the Joint Atomic Energy Intelligence Committee, and the Guided Missile Intelligence Committee--each in its own sphere of responsibility and with the concurrence of the Intelligence Advisory Committee--have derived the following scientific and technical intelligence objectives from DCID 4/6. The statement of these objectives will be revised when required by revision of DCID 4/6.

3. By definition, all items in this listing are deemed to be critical national scientific and technical intelligence factors requiring priority attention and effort. Distinction is made, however, between three levels of priority within the general priority category. Order

of listing within these three groups has no significance with respect to the relative priority of specific items within the group.

I. First Priority Objectives*

A. The capabilities of the USSR to conduct research on and develop weapons and other components of weapons systems requisite for nuclear attack on the United States or key US overseas installations (DCID 4/6, para. I c). Particular emphasis will be placed on the scientific and technological aspects of Soviet work on:

1. Nuclear weapons, nuclear warheads, and special nuclear materials.
2. Non-nuclear components of nuclear weapons and warheads.
3. Bomber aircraft (including nuclear propulsion therefor).
4. Guided missiles (including intercontinental ballistic, long-range non-ballistic/cruise type, air-to-surface, submarine-launched surface-to-surface types, and nuclear power for long-range guided missiles).

*First Priority Intelligence Objectives are those which will permit the US: (1) to anticipate and counter those policies or actions of foreign states which would occasion gravest consequences to the US; and (2) to stimulate policies or actions of foreign states(or actions within them) which could occasion greatest benefit to the US (DCID 4/6, para. 3 a).

5. Submarines (including nuclear propulsion therefor) capable of delivering nuclear weapons.

6. Electronic systems including blind-bombing, long-range navigation, defensive fire control of nuclear delivery vehicles, and electronics (including communications) countermeasures systems.

B. The capabilities of the USSR to conduct research on and develop weapons and other components of weapons systems requisite for defense against air (including missiles) attack (DCID 4/6, para. I c). Particular emphasis will be placed on the determination of scientific research and development on:

1. Nuclear warheads for anti-aircraft missiles, rockets and artillery.

2. Piloted defense aircraft.

3. Both surface-to-air and air-to-air guided missiles.

4. Defense against intercontinental ballistic missiles.

5. Anti-aircraft rockets and artillery.

6. Electronic systems including early warning, ground control intercept, airborne intercept, IFF, and missile guidance radars; air defense filter centers and communications networks; and electronics (including communications) countermeasure systems.

7. Passive defensive measures.

C. Soviet capabilities, plans, and intentions for the clandestine delivery of nuclear, biological or chemical weapons against the US or key US overseas installations (DCID 4/6, para. I d). Particular reference is made to detection of specific scientific and technological accomplishments, such as the development of specialized weapons and the solution of the peculiar problems in packaging, transporting, and storing that will make such delivery feasible.

II. Second Priority Objectives*

A. Sino-Soviet Bloc scientific and technical strengths and weaknesses substantially affecting their military, economic, and

* Second Priority Intelligence Objectives are those which will permit the US: (1) to anticipate and counter those policies or actions of foreign states which would have serious consequences for the US; and (2) to stimulate policies or actions of foreign states (or actions within them) which could occasion great benefit to the US (DCID 4/6, para. 3 b).

political capabilities, including the possibility of major technological breakthroughs (DCID 4/6, para. II e and k). The priority assigned to these strengths and weaknesses applies, in the first instance, to the detection of scientific and technological developments which could give the Sino-Soviet Bloc a technological advantage. When such developments are detected, the priority of the subsequent intelligence effort will be determined by the extent to which the development affects US national security. In addition, second priority coverage will be given to the scientific and technological strengths which are basic elements in Soviet economic and military capabilities and to those technological weaknesses which may reflect grave Soviet vulnerabilities. Therefore, particular emphasis will be placed on:

1. Research and development which are most likely to lead to significant technological advances

   a. Basic scientific research undertaken without specific focus on any particular application (for example, research in solid state physics, cosmic rays, radio astronomy, low temperature physics, upper atmosphere, enzymology, and catalysis).

b. Development of new applications of existing scientific knowledge (for example, earth satellites, weather control, long-range transmission of useful or destructive energy, means of influencing human behavior, and advanced communications systems).

2. Technological developments which can affect significantly the economic potential of the Sino-Soviet Bloc (For example, automation, methods of increasing food supply, and solar and nuclear power)

3. Technological developments which can affect significantly the military potential of the Sino-Soviet Bloc (For example, biological and chemical warfare, armored vehicles, naval vessels, etc.)

4. The organization, control and status of science

5. The quality and quantity of Soviet scientific and technical manpower

6. Fields in which technological weaknesses may reflect grave Sino-Soviet Bloc vulnerabilities

(For example, biological and agricultural sciences related to improved food supply, automatic data processing system for air defense, and inter-continental ballistic missile defense)

B. Scientific and technological developments in Japan, which would have a material bearing on its stability and orientation (DCID 4/6, para. II o).

III. Third Priority Objectives*

In addition to the priority objectives outlines in paras. I and II, above, it is recognized that scientific and technological developments may occur outside those areas discussed, which will have such significance as to affect US security. For that reason, certain third priority objectives (DCID 4/6, para. III) are stated below.

* Third Priority Intelligence Objectives are those which will permit the US: (1) to anticipate and counter those policies or actions of foreign states which would have harmful consequences to the US; and (2) to stimulate policies or actions of foreign states (or actions within them which could occasion substantial benefits to the US (DCID 4/6, para. 3 c)).

A. Non-Sino-Soviet Bloc nuclear energy research and development; the production of fissionable materials and the use of such materials for weapons or other purposes.

B. Significant scientific and technological developments in Western Europe which affect directly the military and economic potential.

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